



## IN VITRO PEPTIDE OR PROTEIN EXPRESSION LIBRARY

### ABSTRACT OF THE DISCLOSURE

The present invention relates to methods of producing peptide or protein expression libraries. In such a library, a population of nucleotide sequences is expressed. The resulting peptides or proteins encoded by those nucleotide sequences are then screened to identify those peptides or proteins having a desired property such as the ability to bind a selected ligand. In the construction and screening of such libraries, it is desired to ensure that the nucleotide encoding a particular protein remains connected in some way with that protein so that once a desired protein having a selected property has been isolated, its encoding nucleotide sequence may be specifically recovered for subsequent manipulation for example using PCR or sequencing. The present invention makes use of a property not previously described in constructing an expression library namely the use of proteins which covalently bind DNA. DNA is expressed in such a way that the protein so expressed binds to its own encoding DNA therefore allowing the DNA to be associated only with its encoding protein.